



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,264	11/21/2000	Daryl J. Pocker	SJO990197US1	3418

32112 7590 11/07/2003

INTELLECTUAL PROPERTY LAW OFFICE
1901 S. BASCOM AVENUE, SUITE 660
CAMPBELL, CA 95008

EXAMINER

PADGETT, MARIANNE L

ART UNIT	PAPER NUMBER
----------	--------------

1762

DATE MAILED: 11/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

60/721,261

Applicant(s)

Packer et al

Examiner

M.L. Page

Group Art Unit

1762

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

☒ Responsive to communication(s) filed on 7/3/03

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

☒ Claim(s) 1-29 is/are pending in the application.

Of the above claim(s) 1-12 is/are withdrawn from consideration.

☐ Claim(s) is/are allowed.

☒ Claim(s) 13-29 is/are rejected.

☐ Claim(s) is/are objected to.

☐ Claim(s) are subject to restriction or election requirement

Application Papers

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).

☐ All ☐ Some* ☐ None of the:

☐ Certified copies of the priority documents have been received.

☐ Certified copies of the priority documents have been received in Application No. _____

☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other _____

Office Action Summary

Art Unit: 1762

1. Claims 13 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The body specification does not appear to have the ranges of low energy being "less than approximately 20 eV" or "from approximately 10 eV to approximately 20 eV" recited therein. These ranges are not new matter, because the original claim 22 had the latter, supporting the highest upper limit; page 5, line 10 teaches "less than or equal to approximately 10 eV"; and page 8 teaches "10 to 20 eV" (no approx.), however to be properly enabled the body of the specification need to teach the whole range. Also see discussion on p 2 of paper#9, mailed 3/31/2003.

Also, where is the support for the new range limit for high-energy carbon ions in claim 13 of > 50eV? It is not in the original claims, which include this lower limit as an intermediate energy range, thus appears to contradict the original specification.

2. Claims 13-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Calling the high-energy > 50eV appears to be unsupported hence New Matter. See above discussion, and note original claim 15-17.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1762

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 13-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Falabella (5,763,087), in view of Ueda et al (5,776,602), optionally in view of Schmidt et al (5,750,210), as discussed in section #4 of paper #9 (3/31/03).

Applicant has clarified ion energy ranges in all their independent claims, however as previously noted Falabella suggest useful energies covering claimed energies, ie. 20eV to 200eV, where the suggestion of grading is present, especially when combined with Ueda et al (602). While applicants call each of their separate energy deposited coatings a layer with a thickness, they may equally be considered sub-layers of the total carbon layer, and one could label the graded sub-layers of the above combination separate layers also. As presently claimed, this layer distinction is only a semantics argument, unless the claims are given more significant substance related thereto.

5. Applicant's arguments filed 7/3/03 and discussed above have been fully considered but they are not persuasive.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing

Art Unit: 1762


date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication should be directed to M L. Padgett at telephone number 703-308-2336 or after mid December (571) 272-1425, on M-F from about 8:30 am-4:30 pm; and FAX #(703) 872-9306.

M.L. Padgett/lap

October 27, 2003

November 6, 2003



MARIANNE PADGETT
PRIMARY EXAMINER